

PROCESS FOR THE DIRECT SYNTHESIS OF ALKYLHALOSILANES

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ABSTRACT

Process for the preparation of alkylhalosilanes by reaction of an alkyl halide, preferably CH_3Cl , with a solid body, referred to as contact body, formed of silicon and of a catalytic system comprising (α) a copper catalyst and (β) a group of promoting additives comprising:

- an additive $\beta 1$ chosen from metallic zinc, a zinc-based compound and a mixture of these entities,
- an additive $\beta 2$ chosen from tin, a tin-based compound and a mixture of these entities,
- optionally an additive $\beta 3$ chosen from cesium, potassium, rubidium, a compound derived from these metals and a mixture of these entities,

said direct synthesis process being characterized by the following points, taken in combination:

- the copper catalyst (α) is in the form of metallic copper, of a copper halide or of a mixture of these entities,
- the contact body additionally includes a supplementary promoting additive $\beta 4$ chosen from a derivative of an acid of phosphorus and a mixture of these entities.